REMARKS

Claims 1 – 37, 39, and 40 are pending in the present Application. Claims 9, 10, 21, 23, and 24 are withdrawn from consideration. No Claims have been cancelled or added and Claims 15, 17, and 34 have been amended, leaving Claims 1 – 8, 11 – 20, 22 – 37, 39, and 40 for consideration upon entry of the present Amendment.

Claims 15 and 34 have been amended merely to change the lower limit for the weight percent of the forensic analytical marker to 0.1 weight percent to place the claims in better condition for allowance. Support for this amendment can at least be found in Claims 11 – 14 as originally filed as well as in Paragraph [0062] as originally filed. These amendments do not change the scope of the claim, add new matter, increase the number of claims, or otherwise require any additional search. The amendments are supported by the specification and merely place the claims in better condition for allowance. Applicants respectfully request that the amendments be entered. No new matter has been introduced by these amendments. Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks. Claim 17 has been amended merely for clarity. This amendment does not change the scope of the claim, add new matter, increase the number of claims, or otherwise require any additional search.

Drawings

Figure 2 is objected to as being of poor quality. Figure 2 is being resubmitted with this Amendment. Reconsideration and withdrawal of this objection are respectfully requested.

Claim Objections

Claim 17 is objected to because it should recite "$(-CH_2-)_n$" instead of "-(CH2)-n". Applicants respectfully submit that Claim 17 has been amended to recite $(-CH_2-)_n$. Reconsideration and withdrawal of this objection are respectfully requested.

Specification Rejections Under 35 U.S.C. § 112, First Paragraph

The rejections of record in the previous office action are maintained. The Final Office Action dated April 24, 2008 (hereinafter "FOA 04/08") continues to allege that the definitions for "forensic authentication markers", "dynamic response authentication markers", "forensic

authentication technique", and "dynamic response analytical technique" as recited in the Specification are not clear. In particular, FOA 04/08 alleges that the definition for "forensic authentication marker" as provided in Paragraph [0036] can be associated with any marker, tag, or label for a compound, since allegedly "any marker, tag or label for the compound by definition should not be present in the original compound and should have a characteristic fingerprint upon detecting with a specific analytical technique". (FOA 04/08, Page 10) FOA 04/08 invites Applicants to see the definition of a marker in any online dictionary. (FOA 04/08, Page 10) Applicants are also invited to supply a definition for a conventional molecular marker.

Applicants respectfully decline and instead, submit that they have defined and claimed a "forensic analytical marker", not a conventional molecular marker. Moreover, an applicant is entitled to be his or her own lexicographer and may rebut the presumption that claim terms are to be given their ordinary and customary meaning by clearly setting forth a definition of the term that is different from its ordinary and customary meaning(s). *See In re Paulsen*, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994) (inventor may define specific terms used to describe invention, but must do so "with reasonable clarity, deliberateness, and precision" and, if done, must "'set out his uncommon definition in some manner within the patent disclosure' so as to give one of ordinary skill in the art notice of the change" in meaning) (quoting *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1387-88, 21 USPQ2d 1383, 1386 (Fed. Cir. 1992)). Furthermore, where an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the claim. *Toro Co. v. White Consolidated Industries Inc.*, 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999) (meaning of words used in a claim is not construed in a "lexicographic vacuum, but in the context of the specification and drawings").

Applicants defined "forensic analytical marker" to be "one or more organic or inorganic functional groups or structures that are not originally present in the chemical structure of the polymer in an amount or configuration detectable by a forensic analytical technique but which, when incorporated with the substrate polymer, result in a tagged polymer that has a unique signal detectable by a forensic analytical method." (Paragraph [0036]) Thus, Applicants have provided a clear and definite definition of "forensic analytical marker."

FOA 04/08 also alleges that the term "dynamic response analytical marker", which Applicants defined to include spectroscopic tags, thermochromic compounds, and optically

variable tags is indefinite. (FOA 04/08, Page 11) In particular, FOA 04/08 alleges that it is not clear how spectroscopic tags differ from optical markers, because allegedly fluorophores are optical markers. (FOA 04/08, Page 11) Applicants respectfully disagree and submit that a clear and definite definition for "dynamic response analytical marker" is provided in the Specification. Specifically, a dynamic response authentication marker is defined as a spectroscopic tag, a thermochromic compound, and an optically variable tag. (Paragraph [0064]) The specification states that spectroscopic tags make it possible to determine thermal history and degradation of a polymer. (Paragraph [0065]) Paragraphs [0066] to [0076] further describe spectroscopic tags. Thermochromic compounds are described in the specification generally as compounds that change color as a function of temperature and are further described in Paragraphs [0077] to [0086]. Optically variable tags are described in the specification generally as fluorescent or luminescent materials that are selected to be chemically compatible with the polymer matrix and have a heat stability consistent with engineering plastics compounding and in particular with the processing conditions of the polymer substrate. Optically variable tags are further described in Paragraphs [0087] to [0098].

FOA 04/08 further alleges that it is unclear if spectroscopic markers are not selected to be chemically compatible with the polymer matrix and have a heat stability consistent with engineering plastics compounding and in particular with the processing conditions of the polymer substrate because optically variable tags are defined to be such. (FOA 04/08, Page 11) Applicants respectfully submit that spectroscopic markers and optically variable tags are separate and distinct types of a dynamic response analytical marker. Thus, the terms do not need to be defined identically to qualify as dynamic response analytical markers since, as is noted above, Applicants may be their own lexicographers.

FOA 04/08 also alleges that it is unclear as to what "dynamic response analytical techniques" are because allegedly "[a]ll analytical methods are in fact 'dynamic response analytical methods', since all disclosed methods, whether they are listed as 'forensic analytical methods' or 'dynamic response analytical methods', including NMR, EPR, etc., are analytical methods which are responsive to dynamic processes occurring with the material." (FOA 04/08, Page 11) Applicants respectfully disagree and submit that not all analytical methods are dynamic response analytical techniques. As is noted above, Applicants may be their own lexicographers. Applicants have provided separate and distinct definitions for a dynamic

response analytical technique and a forensic analytical technique. Furthermore, as is described in Paragraph [0101] of the Specification, dynamic response analytical techniques are described as a dynamic response analytical technique selected from the group consisting of fluorescence, luminescence, vibrational, and electronic spectroscopy, visual observations under specific lighting conditions, and combinations thereof, while forensic analytical techniques are described as analytical methods that generally require significant expenditures with respect to equipment and/or preparation and "are capable of detecting a forensic authentication marker in the amounts used such that they produce a signal or response that confirms the presence of the forensic authentication marker in the tagged polymer. (Paragraph [0063]) Moreover, as disclosed in Paragraph [0063], "the forensic analytical techniques will provide a determination of the structure of the forensic authentication marker as opposed to measuring a signal such as fluorescence or absorption." Thus, contrary to that alleged in FOA 04/08, not all analytical methods are dynamic response analytical techniques. Accordingly, the specification meets the requirements of first paragraph of 35 U.S.C. §112. Reconsideration and withdrawal of this objection are respectfully requested.

Claim Rejections Under 35 U.S.C. § 112, First Paragraph

Claims 15 and 34 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement because allegedly "the specification does not disclose any 'forensic analytical methods', which allow detecting the forensic authentication marker in less than 0.005 wt.% of the total weight of the polymer." (FOA 04/08, Page 5) FOA 04/08 also alleges that NMR, to which the examples are directed, "is not able to detect less than 1% of the compound". Applicants respectfully traverse this rejection. Claims 15 and 34 have been amended merely to place the claims in better condition for allowance. Claims 15 and 34 have been amended so that the lower limit for the forensic analytical marker is 0.1 weight percent. Applicants respectfully submit that NMR is able to detect 0.1 weight percent of a material in a composition.

In order to make a rejection, the examiner has the initial burden to establish a reasonable basis to question the enablement provided for the claimed invention. *In re Wright*, 999 F.2d 1557, 1562, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993) (examiner must provide a reasonable explanation as to why the scope of protection provided by a claim is not adequately enabled by

the disclosure). As stated by the court, "it is incumbent upon the Patent Office, whenever a rejection on this basis is made, to explain why it doubts the truth or accuracy of any statement in a supporting disclosure and to back up assertions of its own with acceptable evidence or reasoning which is inconsistent with the contested statement. Otherwise, there would be no need for the applicant to go to the trouble and expense of supporting his presumptively accurate disclosure." *In re Marzocchi*, 439 F.2d 220, 224, 169 USPQ 367, 370 (CCPA 1971). FOA 04/08 provides no basis in fact or technical reasoning to support the allegation that NMR is not able to detect lower than 1 weight of a compound in a mixture. The Examiner's burden has not been met. Claims 15 and 34 are fully enabled by the written description. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 1 – 8, 11 – 20, 22, 25 – 37 and 39 - 40 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, FOA 04/08 alleges that a plurality of embodiments "providing examples of key terms that lay in the grounds of the invention, such as 'forensic authentication marker', 'dynamic response authentication marker', and corresponding techniques cannot be called clear and unambiguous definitions". (FOA 04/08, Page 12) Applicants respectfully disagree and direct attention to the section above where the terms are discussed in regard to the specification objections. The terms are clearly and definitely defined in the specification. Thus, the terms are not indefinite. Reconsideration and withdrawal of this rejection are respectfully requested.

With regard to Claims 2 – 6, FOA 04/08 alleges "Applicants confirm unclarity and indefinite[nes]s of these expressions by further indicating that the markers can react with the substrate material." (FOA 04/08, Page 12) FOA 04/08 alleges further that "[t]his is an unconventional definition of the term 'marker', because conventional markers, while can be incorporated into compounds, are not supposed to change their properties." (FOA 04/08, Page 12) Applicants submitted in response to the previous office action dated September 25, 2007 (hereinafter "OA 09/07") that optical properties of the substrate material can be affected by the authentication marker if the authentication marker reacts with the substrate material. Applicants did not state that their authentication marker reacts with the substrate material, but were merely

responding to OA 09/07's contention that Claims 2 – 6 were indefinite because it allegedly was unclear how an authentication marker can affect the optical property of the substrate material. (OA 09/07, Page 6) Applicants were merely explaining how that could occur. Thus, Claims 2-6 are definite. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim 7 is rejected because it allegedly is not apparent which resonance spectroscopy methods are meant in the claim. (FOA 04/08, Page 6) Applicants respectfully disagree and submit that Paragraph [0063] of the specification defines resonance spectroscopy methods as those such as nuclear magnetic resonance (NMR) and electron spin resonance (ESR). Claim 7 is definite. Reconsideration and withdrawal of this rejection are respectfully requested.

Claims 11 – 15 are rejected because it allegedly is not clear as to how the weight percentage is obtained since in Claims 16 and 17 since the forensic authentication marker is recited as a functional group. (FOA 04/08, Page 6) Applicants respectfully disagree and submit that Example 2 (Paragraphs [0128] and [0129]) and Figure 2 of the specification set forth results for identification of forensic authentication markers according to the disclosed methods. Specifically, Example 2 discloses solution state proton nuclear magnetic resonance (NMR) spectroscopy as the method used to the quantify the type and quantity of the forensic authentication marker by dissolving pellet samples in a solution and then analyzing on a spectrometer. The characteristic peaks attributable to the functional groups on the forensic analytical marker were mathematically analyzed and the concentration was determined. NMR with peak integration as disclosed in the present application is a method commonly used and one that one skilled in the art would be familiar with and understand how to perform. Furthermore, one skilled in the art would understand that NMR is a technique that measures peaks attributed to different elements, including the functional groups listed in Claims 16 and 17. As a result, Claims 11 – 15 are definite. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim 16 is rejected because it allegedly is not clear how it is possible to have a forensic authentication marker, which is an alkyl group of 2 or more carbon atoms that is not present in the polymer. (FOA 04/08, Page 6) Applicants respectfully disagree and submit that Paragraph [0036] of the specification explains how it is possible to have a forensic authentication marker, which is an alkyl group of 2 or more carbon atoms, that is not present in the polymer. Specifically, Paragraph [0036] states: "For example, although certain functional groups may be

present in the substrate polymer, for example, methylene groups, it is an aspect of the disclosed methods that they may not be present in the substrate polymer in the same amount or configuration that gives rise to detection by a forensic analytical method." Thus, Claim 16 is definite. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim 18 is rejected as confusing because FOA 04/08 is not sure whether it recites two polymers, one overlaying another, with the first polymer being a substrate, and the second comprising the fluorescent authentication marker. (FOA 04/08, Page 6) Applicants respectfully disagree and submit that Claim 18 recites, "...the compound comprising a forensic authentication marker is a polymer having a forensic authentication marker". Claim 1, from which Claim 18 depends, recites a tagged polymer comprising "a substrate polymer, a compound comprising a forensic authentication marker, and a dynamic response authentication marker". Claim 18 refers to the compound of Claim 1 wherein the compound is a polymer. Thus, Claim 18 refers to a substrate polymer, a polymer having a forensic authentication marker, and a dynamic response authentication marker. Applicants also submit that Paragraph [0042] of the specification explains differences between compounds and polymers. Specifically, Paragraph [0042] states "Compounds comprising one or more forensic authentication markers may be in the form of monomers, compounds, oligomers, or polymers." Claim 18 is definite. Reconsideration and withdrawal of this rejection are respectfully requested.

FOA 04/08 alleges Claim 19 is unclear as to what is meant by "wherein the polymer is miscible with polycarbonate". Applicants respectfully submit that Claim 19 does not recite that phrase, but rather recites "wherein the compound comprising a forensic authentication marker is miscible with polycarbonate." Applicants respectfully submit that Paragraph [0044] of the specification refers to miscible as "a polymer that upon incorporation with the substrate polymer shows no phase separation at the concentration levels for the compound disclosed herein." The definition explains how one polymer can be miscible with another polymer. Applicants also submit that they may be their own lexicographers and have provided a clear and definite definition of the term "miscible" in the specification. Where an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the claim. *Toro Co. v. White Consolidated Industries Inc.*, 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999) (meaning of words used in a claim is not construed in a "lexicographic vacuum, but in the context of the specification and drawings").

Thus, Claim 19 is definite. Reconsideration and withdrawal of this rejection are respectfully requested.

Claims 20 and 22 are rejected because it allegedly is not clear which copolymers are recited in the claims. (FOA 04/08, Page 6) FOA 04/08 also alleges that the abbreviations used in the claims are not conventional. Applicants respectfully disagree and submit that the abbreviations as used are conventional abbreviations for the materials listed. Applicants also submit that Paragraph [0042] of the specification defines copolymer as: "Copolymer as defined herein refers to a material having more than ten total repeating units wherein at least two of the repeating units are different. Copolymer and polymer are used interchangeably herein." The claims disclose DMBPC copolymer, DDDA copolymer, eugenol-siloxane-polycarbonate copolymer, and ITR-PC copolymer. These are the copolymers recited in the claims. Thus, Claims 20 and 22 are definite in light of the definition in the specification. Reconsideration and withdrawal of this rejection are respectfully requested.

Regarding Claim 28, FOA 04/08 states that it is rejected under 35 U.S.C. § 112, Second Paragraph, but provides no description as to why. The only reference to Claim 28 in this section is on Page 14 of FOA 04/08 in the response section where "[r]egarding claim 28, the examiner already provided her arguments in of a total improbability of such a number" is stated. (FOA 04/08, Page 14) However, FOA 04/08 only provided arguments as to the limits of detection on the forensic analytical markers. Claim 28 is directed to a dynamic response analytical marker, not a forensic analytical marker. Moreover, the rejections on the forensic analytical markers were made as rejections under 35 U.S.C. § 112, First Paragraph, while this rejection is supposedly under 35 U.S.C. § 112, Second Paragraph. Claim 28 is clear and definite. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim 33 is rejected as allegedly not being clear in regards to performing the step of authentication of a tagged article. (FOA 04/08, Page 7) The OA alleges that Claim 33 states the article should not be destroyed in order to be authenticated because the examples in the specification comprise dissolving the material to analyze the polymer with NMR spectroscopy, which allegedly contradicts the subject matter of Claim 33. (FOA 04/08, Page 7) Applicants respectfully disagree. Claim 33 recites a method of authenticating an article comprising

> incorporating together a substrate polymer and a compound comprising a forensic authentication marker and a dynamic response authentication marker to make a tagged

polymer, the forensic authentication marker being present in the tagged polymer in an amount sufficient to be detected by a forensic analytical technique,

forming a tagged article from the tagged polymer, and

authenticating that an article is a tagged article by detecting the forensic authentication marker using a forensic analytical technique.

Applicants respectfully submit the examples simply illustrate one embodiment of the present application and should not be read to limit the claims. One skilled in the art would understand that forensic analytical techniques such as NMR, XPS-ESCA, and ESR, can be used to provide a determination of the structure of the forensic authentication marker as opposed to measuring a signal such as fluorescence or absorption. As a result, Claim 33 is definite. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim 33 is also rejected because the step of "incorporating together a polymer and a compound comprising a forensic authentication marker" is allegedly different from a description of "incorporating the forensic authentication marker and dynamic response marker *into* the substrate polymer" as described in the specification. (FOA 04/08, Page 14). Applicants respectfully disagree and submit that Paragraph [0107] of the specification discusses methods for incorporating the forensic authentication and dynamic response authentication markers into the substrate polymer such as compounding, solution casting, admixing, blending, or copolymerization. Applicants also submit that one skilled in the art would understand the meaning of "incorporating together a polymer and a compound...". Claim 33 is definite. Reconsideration and withdrawal of this rejection are respectfully requested.

Claims 39 and 40 are rejected as allegedly having the same flaws in its recitation as the preceding claims. (OA 09/07, Page 7) Applicants respectfully disagree and submit that Claims 39 and 40 are definite for all the reasons discussed above. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim Rejections Under 35 U.S.C. § 102(b)

Claims 1 – 8, 11 – 14 and 16 - 19 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by U.S. Patent No. 1,487,967 to Livesay. Applicants respectfully traverse this rejection.

To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Varient Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987). Firstly, Applicants note they assume when referring to Livesay, FOA 04/08 is actually referring to GB 1,487,967, as U.S.

Patent No. 1,487,967 was granted to J.B. Milton and is directed to a gravity lock. FOA 04/08 alleges Livesay discloses a method for authenticating that a test polymer is a tagged polymer, with a tagged polymer comprising any one of the polymers disclosed on pages 1 and 2, the tags comprising microparticles of a distinctive shape or size and comprising specifically coded tagging elements. (FOA 04/08, Page 7)

However, Livesay actually discloses

> an explosive composition comprising an explosive material and microparticles of a tack-free organic carrier which does not have a softening point below 60 °C, which microparticles have a distinct shape having one or more tagging elements in an amount of at least 0.1 percent of the total weight, and which are capable of surviving detonation of the explosive material and so permit retrospective identification of the explosive although it has been detonated.

(Claim 1) Livesay fails to disclose various elements of the claims including, "[a] method of authenticating that a test polymer is a tagged polymer, said tagged polymer comprising a substrate polymer, a compound comprising a forensic authentication marker, and a dynamic response authentication marker..." (Claim 1) Livesay also fails to disclose "...testing the test polymer for the forensic authentication marker using a forensic analytical technique..." or "...testing the test polymer for the dynamic response authentication marker using a dynamic response analytical technique..." and "authenticating that a test polymer is a tagged polymer if the forensic authentication marker and dynamic response authentication marker are detected." (Claim 1)

Livesay fails to disclose both a forensic analytical marker detectable by a forensic analytical technique and a dynamic response analytical marker detectable by a dynamic response authentication technique and thus does not teach Applicant's claimed combination. As a result, Claim 1 is novel. The dependent claims add further patentable distinction and are also not anticipated by Livesay. Reconsideration and withdrawal of this rejection are respectfully requested.

Claims 1 – 6, 16 – 19, 30 – 31, 33, 35 – 37 and 39 - 40 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Matsumoto et al. (Matsumoto) "A clone preventive technique which features magnetic micro-fibers and cryptography", SPIE, 1998, Vol. 3314, pages 275-286. Applicants respectfully traverse this rejection.

To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Varient Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987). FOA 04/08 alleges Matsumoto teaches

> a clone preventative technique which features magnetic micro-fibers and cryptography, comprising incorporating micro-fibers containing iron oxide particles..., which can be detected with micro fibers detector..., into polymer substrate such as polycarbonate..., and using the digital signature utilizing asymmetric cryptography.

(FOA 04/08, Page 8)

The OA alleges the micro-fibers in Matsumoto are the forensic analytical marker, detected with a micro-fibers detector, which allegedly is the forensic analytical technique, using a digital signature, which allegedly is a physical dynamic response authentication marker, utilizing asymmetric cryptography allegedly the dynamic response analytical technique. (FOA 04/08, Page 8)

Applicants respectfully disagree and submit that Matsumoto does not disclose a dynamic response authentication marker as recited in the present claims. The present claims disclose "a compound comprising a forensic authentication marker, and a dynamic response authentication marker" (Claims 1, 33, and 39). Matsumoto discloses micro-fibers and a digital signature. Applicants respectfully submit that micro-fibers and a digital signature as disclosed by Matsumoto, are not a compound comprising a forensic authentication marker and a dynamic response authentication marker. Thus, there is no anticipation since Matsumoto at least fails to disclose "a compound comprising a forensic authentication marker, and a dynamic response authentication marker". The claims are novel. The dependent claims add further patentable distinction and are also not anticipated by Matsumoto. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1 – 8, 11 – 20, 22, 25 – 37 and 39 – 40 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over U.S. Patent No. 6,099,930 to Cyr et al. (Cyr), in view of U.S. Patent No. 6,001,953 to Davis et al. (Davis), and U.S. Patent No. 6,411,208 to Buess et al. (Buess). Applicants respectfully traverse this rejection.

The OA alleges Cyr teaches methods for marking digital compact discs as a means to determine its authenticity where the methods comprise incorporating a near infrared fluorophore into the CD.... (FOA 04/08, Page 8) The OA also states that a fluorophore is a dynamic response authentication marker, but admits that Cyr does not teach a different forensic authentication marker or using a different analytical technique for forensic authentication. FOA 04/08 then alleges that it would have been obvious to use the material in Davis, which discloses various compositions used for manufacturing optical articles based on polycarbonates, including DMBPC. (FOA 04/08, Page 9) FOA 04/08 concludes that it would have been obvious to use the composition of the articles as an authentication signature since the content of such compositions is allegedly optimized for obtaining the best properties required for specific applications of CDs because such analytical techniques as NMR or NQR are allegedly well known for obtaining authentication signatures as disclosed by Buess. (FOA 04/08, Page 9) The OA states it would have been obvious to use two authentication techniques for such molded articles as CDs—one based on fluorescence detection as in Cyr and a second based on the specific composition of the CD material disclosed by Davis. (FOA 04/08, Page 9)

Applicants respectfully disagree and submit that a *prima facie* case of obviousness has not been established. For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art; that the prior art relied upon, or knowledge generally available in the art at the time of the invention, must provide some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). "A patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007). To find obviousness, the Examiner must "identify a reason that would have prompted a person of ordinary skill in the art in the relevant field to combine the elements in the way the claimed new invention does." *Id.*

Applicants respectfully submit that there is no motivation, prompting, or suggestion to combine the references in the manner suggested by FOA 04/08. Applicants submit that in determining the differences between the prior art and the claims, the question under 35 U.S.C. §103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. MPEP § 2141.02, citing *Stratoflex, Inc.*

v. Aeroquip Corp., 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983) Here, FOA 04/08 relies on Davis simply to disclose that DMBPC can be used in a composition of polycarbonate. FOA 04/08 states that "[t]he examiner has specifically indicated that Davis discloses optimized and well defined compositions based on polycarbonate DMBPC polymer for producing CDs". (FOA 04/08, Pages 15-16) Thus, FOA 04/08 is relying on Davis to disclose that DMBPC can be used in a composition of polycarbonate. Additionally, Buess discloses a method where the target material is identified twice, first by piezoelectric resonance and second by NMR or NQR.

In Applicants specification, the forensic analytical marker is detected by a forensic analytical technique and the dynamic response authentication marker is detected by a dynamic response authentication technique. The references relied upon by FOA 04/08 fail to disclose detecting a forensic analytical marker with a forensic analytical technique and detecting a dynamic response authentication marker with a dynamic response authentication technique. Furthermore, by using both a forensic authentication marker and a dynamic response authentication marker, a multi-level determination of authenticity can be accomplished.

Buess fails to remedy the multiple deficiencies of Cyr and Davis and further fails to provide the motivation to combine these references. Since the references cited in FOA 04/08 fail to disclose detecting a forensic analytical marker with a forensic analytical technique and detecting a dynamic response authentication marker with a dynamic response authentication technique, there is no motivation or suggestion to combine the references as suggested by FOA 04/08. The present claims remain novel and non-obvious over the cited references. The dependent claims add further patentable distinction and are also nonobvious. Reconsideration and withdrawal of this rejection are respectfully requested.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and withdrawal of the objection(s) and rejection(s) and allowance of the case are respectfully requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 07-0893.

Respectfully submitted,

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